CULTURE AS A CONTEXTUAL VARIABLE IN THE STUDY OF DIFFERENTIAL MINORITY STUDENT ACHIEVEMENT

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That human beings have been able to survive and indeed thrive on this planet has been attributed to, among other factors, the ability of humans to cooperate in social groups developing distinct adaptive behavior patterns - designs of living broadly termed "culture." This makes culture an important, as well as advantageous, contextual variable to consider in studying humans. However, it is prudent to begin by establishing a sense of what constitutes culture.

In defining culture, it is not altogether surprising to find that the definitions for culture are as varied as the number of investigators, mostly anthropologists, defining it. This paper will adapt a particular definition widely cited in cross cultural psychology from Kroeber and Kluckhohn:

Culture consists of patterns, explicit and implicit, of and
for behavior acquired and transmitted by symbols,
constituting the distinctive achievement of human groups,
including their embodiments in artifacts; the essential core
of culture consists of traditional (i.e. historically derived
and selected) ideas and especially their attached values;
culture systems may, on the one hand, be considered as
products of actions, on the other as conditioning elements of
further actions. (Cited in Laboratory of Comparative Human
Cognition, 1982, p.645)

EFFECTS OF CULTURE ON MINORITY STUDENT ACHIEVEMENT

The recent concern to once again clarify the relationship between culture and learning was triggered, not by educators, but by national leaders and the general public. During the last decade or so, both political and economic pressures have shaped a renewed attention and focus on the ability of schools in preparing our students. Much to the distress of the public, national reports on school effectiveness have shown disappointing results (Applebee, Langer, & Mullis, 1987). These results were particularly alarming for ethnic minority students, as report after report demonstrated the steady decline of educational attainment of these students (Trueba, 1987).

The search for an explanation of the role of culture on the achievement patterns of minority students has consumed a great deal of time and effort in the last decade. While there is a great deal of literature available on the topic, there has been much fragmentation. In an effort to better conceptualize the current efforts, the investigation of the role of culture can be categorized as following two lines of inquiry: psychocultural incompatibility and sociocultural effect. While the two inquiries do overlap, it is useful to separate them for clarity of reflection.

PSYCHOCULTURAL INCOMPATIBILITY

One line of inquiry explaining differential student achievement patterns attributes the difference to variability in basic psychological abilities influenced by culture. These psychocultural skills include variables such as cognition, language and communication, social interaction patterns, problem-solving, and learning approaches. Within this line of argument, there seem to be two general perspectives. The first is that differences in these psychocultural abilities are composed largely of the presence or the absence of particular abilities inherent in different cultural groups. Wiseman (1980) informally called it the "what is it that you don't have that we do, and vice versa" position. The other views the differences as more influenced by the unique demands of individual ecologies.

Presence or Absence of Particular Abilities. The first perspective of viewing differences in basic psychological abilities among people is one with a rather long and somewhat controversial history. Its controversy is primarily due to an historically presumed truth that Anglo cultures represent the norm to which others should be compared. This assumption led to the tools of psychological studies (e.g. development of tasks, instrument s of measurement, etc.) being based solely on the Anglo western society. When non-Anglo, nonwestern people did not perform at the same level, many psychologists made leaps to conclude cultural or ethnic inferiority of non-Anglo individuals.

Many early studies in psychology describing differences among cultural groups involved the study of cognition. A small historical sample of these studies includes the proposed science of heredity, eugenics, by Sir Francis Galton (a cousin of Charles Darwin) in 1874. Galton's proposal included the idea of racial improvement through selective mating and sterilization of the "unfit" (Galton, cited in Guthrie, 1976, p. 37). Terman, who revised the Binet Intelligence Scales, and who was later president of the American Psychological Association, noted that mental retardation represents the level of intelligence which is common among Spanish-Indians and Mexican families of the Southwest and also among Negroes. Their test performance was viewed as racially caused (Terman, cited in Guthrie, 1976, p.51). These conclusions were based on a scale not standardized on Black or Hispanic people and administered in English. Hunter (1922) reported a positive correlation between increasing degree of white blood in American Indians and scores on the Otis Intelligence test (cited in Guthrie, 1976). These and other studies supported the Mulatto Hypothesis that people of racially mixed background were inferior to "pure" (white) backgrounds. More recently, a stir was created with Jensen's (1973) proclamation of genetic inferiority of minorities in the United States. Sue and Padilla (1986) noted that in the United States, the four major ethnic minority groups (i.e. American Indians, Blacks, Hispanics, and Asians) have been, at various times throughout the history of this country, defined as being genetically inferior to whites. The bases of these declarations have usually been related to the "nonstandard" ways in which psychocultural abilities were displayed. Other studies with fewer or no racist overtones sought to identify supposedly inherent psychological differences among individuals from various cultural groups. A small sample of these includes a review of literature by Shade (1984) which noted that African Americans have a distinctly different perceptual modality preference-kinetic and tactile-and problem-solving approach-holistic style. This style is believed to be influenced by the way language is

used by Blacks (Cooper, 1981). A review of literature by Hsia (1983) for the National Institute of Education suggested that Asian Americans tended to be field-dependent and were better in cognitive analysis and restructuring tasks. Hmong students studied by Worthley (1987) are seen as having field-dependent learning styles. Much research exists which suggests that Hispanic American students are field-independent and spatial-holistic learners (Ramirez & Castaneda, 1974; Martinez & Norman, 1984; Saracho, 1983). American Indians are also thought of as having holistic learning styles (Pepper & Henry, 1986). A significant number of these studies were completed by ethnic minority investigators.

Abilities influenced by Individual Ecologies. The second perspective views different psychocultural abilities as a result of differential environmental conditions and demands. This view is perhaps best exemplified by the Vygotskian tradition. Unlike the first perspective, this view frees researchers from searching for differences in basic psychological structures. An illustration of this view is the concept of "functional systems" proposed by A. R. Luriia, a student of L. S. Vygotsky. Luriia (1966) described two levels of psychological functions: The first is the basic psychophysical functions (e.g. movements, sensations, etc.) which are considered unchanging, and the second is the "higher order" mental functions (e.g. memory, thought, active attention, etc.) which arise in the course of socially determined activities. After the "social genesis" of these functions, "mediate structures," resulting from both environmental and social demands shape thinking and rules of behaviors; ultimately leading to socially acceptable functioning. Essentially, through our social experience we learn what to attend to, how to perceive it, and what action to take on it (Wiseman, 1980).

While the discussion of both of the above perspectives has been brief, these perspectives appear to be within a line of inquiry which has a psychological focus in studying culture's influence on school achievement. Furthermore, these perspectives seem to lead to inferences about differential student achievement being related to different psychocultural skills displayed by the various cultural groups. The overall implication seems to be that undesirable achievement is directly related to an incompatibility between the students' manifest abilities and those expected by the school.

The school is viewed as a culture which reinforces and expects a certain set of psychocultural abilities. For example, Tharp (1989) suggested that schools have a tendency towards verbal/analytic rather than visual/holistic approaches of thinking and problem solving. Johnson and Johnson (1975) have suggested schools tend to promote competitive learning styles rather than cooperative learning styles. Ramirez and Castaneda (1974) suggested a school tendency for field independence rather than field-dependence experiences. Several decades of struggles by bilingual education advocates have certainly verified the overwhelming preference toward using one language in instruction (English). Where individual students come to school with similar or compatible psychocultural abilities, or are at least able to learn these abilities, success is considered more likely. Conversely, students with incompatible abilities will likely meet school failure (Tharp, 1989; Weisner, Gallimore, & Jordan, 1988; Cazden & Leggett, 1981).

SOCIOCULTURAL EFFECTS

A somewhat different line of inquiry directs its attention primarily on a sociological-historical rather than a psychological level. This perspective views differential in student achievement as related to variability in sociocultural and historical trends and their effects on different minority groups. Two related perspectives within this line of inquiry examine the sociocultural circumstances surrounding the development of language and cultural preferences and differing reactions of groups based on type of minority status.

Development of Language/Cultural Preferences. The social processes reflected in the language situation

within the history of the United States were examined by Minaya-Rowe (1986). While comparing the historical evolution of language attitudes between South America and North America, she made the observation that the stages in the latter context may look like this: During the seventeenth and eighteenth centuries, there was a stage of intrusive European language communities; then during the late eighteenth through the nineteenth centuries, English was made the official language, and there was a gradual yielding of all other languages; in the third stage during the late nineteenth and early twentieth centuries, initial non-English monolingualism usually shifted to one-and-a-half generational bilingualism; there was also a not so subtle undertone of monoculturalism. These attitudes were embraced to create a melting pot society, where "real" members of the American society were ones who spoke English and emulated cultural characteristics of the Western Europeans. These historical attitudes, subtle but highly influential, contributed substantially to a subtractive environment for non-Western and non-English families. Hernandez-Chavez (1984) noted that there was much giving up of one's native language and ethnic identity as a result of these prolonged subtractive tendencies.

Influence of Minority Status. A related perspective on sociocultural and historical forces is best exemplified by the work of the cultural anthropologist John Ogbu. Ogbu and Matute-Bianchi (1986) wrote a compelling chapter which sought to describe differential reactions of different types of minorities to sociocultural factors. Schooling, in order to be a motivating concept, must have some connection to societal benefits, such as finding jobs, making money, being successful in the work force. They suggest that this connection facilitates the incorporation of the pursuit of education into the status mobility system or folk theory of success and will eventually become institutionalized in the culture for groups of people. However, some minority groups have been involuntarily incorporated into society and involuntarily relegated to menial occupations or ways of life and do not require and do not reward school success. "Involuntary" immigrants are those who have been conquered or brought in as slaves. Ogbu (1978) hypothesized that these "caste-like" minorities have folk theories of success or coping strategies that do not necessarily encourage successful school experiences due to a history of nonreinforcement of school experiences. These groups are contrasted to the "voluntary" immigrants, who have made conscious and independent decisions to be here and who are able to develop school-related folk theories of success in spite of systematic oppression and discriminatory practices. Success further strengthens the connection for future school involvement.

The brief reviews of the perspectives outlined above suggest that these investigators are interested in issues with a sociological emphasis, that is, the examination of the historical impact of entire social systems. Relationships between groups of individuals are the units of measure rather than relationships between individuals. An implication of these gradual yet prolonged and strong influences is that they serve to systematically alienate different minority groups' participation in the mainstream, including the school experience. Where alternative coping and living skills must be developed to maintain self-esteem, individual groups may begin to feel a loss of control of their lives. This external sense of control also influences the amount of effort and persistence put forth by individuals in taking on daily challenges, including the schooling experience.

SUMMARY

As noted earlier, these two lines of inquiry explaining the relationship between culture and cognition as it relates to school learning overlap, and the overlaps can be viewed from several levels. On one level, they overlap on the influences of the various constructs that have been proposed and studied (for example, sociocultural factors have certainly influenced the development of various psychocultural skills, such as perception, cognitive styles, and self-esteem; and individual psychocultural skills have also helped shape

reactions of groups of people); on another level, they could also overlap as part of a continuum in the conceptualization of the overall situation (for example, the psychocultural perspectives as a micro level approach and sociocultural perspective as the macro level analysis).

Within each line of inquiry, however, additional research is essential to better define the issues. For example, in the psychocultural approach, the issue of student-school compatibility has yet to be directly linked to academic achievement outcomes. And if modification of the classroom environment is warranted, specifics on what's, how's, who's and when's are still needed. The identification of teachers' thinking processes and behaviors would have great ramifications for teacher training institutions. Within the sociocultural approach, decisions on how best to influence generations of folk theories, beliefs, and attitudes must be clarified. Will it be legislative mandates with subsequent governmental monitoring? Or will it be structuring social policies with incentives? These are just some of the issues that remain to be resolved.

In the desire to improve the persistent disproportionate school failure of minority students, the precise relationship between culture and school achievement is of high interest and paramount urgency to educators as well to the nation as a whole. Clarification of this relationship will likely add another piece to the puzzle to facilitate the reversal of decades of poor achievement patterns. Although the quantity of work examining this relationship is voluminous, this paper's brief review provides some evidence of the divergent nature of these investigations with the exact nature of the relationship still somewhat ambiguous. Due to the widely disparate approaches to this topic, two lines of inquiry were pursued in order to more clearly examine the issues. This paper sought to clarify the overall picture of the various approaches to investigating culture's role on differential student achievement patterns by different minority groups to all concerned individuals. This understanding would help to refine our formulation of hypotheses so that empirical implications may be deduced, which will, I hope, lead to the identification of the most advantageous next steps.

The next steps must definitely involve behavioral researchers working closely with policy makers, as the nature of this challenge will unlikely be met with technology alone. The successful plan would need to incorporate technical knowledge with social schemes to help change attitudes. Careful attention to packaging and marketing would also appear to be critical in order to overcome the ineptitude that educators typically show in influencing public opinions and attitudes.

This entire process can take place with major stakeholders and research groups working together and agreeing to tackle this major challenge in a systematic way for example, drafting a long-term master plan, with specific short-term goals, in which each group would contribute important parts. This type of coordination will minimize individual investigators conducting their own isolated line of research and proposing divergent remedies in the typically fragmented way of educational research with little that policy makers can use to make a difference.

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